

ADAPTABLE PAYLOAD ENABLING ARCHITECTURE**ABSTRACT OF THE DISCLOSURE**

Apparatus and methods for situating and securing payloads to support structures are disclosed. In one embodiment, an assembly includes a support structure, a floor assembly, and a payload assembly. The floor assembly includes a plurality of elongated engagement members coupled to the support structure, the engagement members being spaced apart and mostly parallel, each engagement member including an engagement surface. The payload assembly includes a payload component positioned proximate the floor assembly, and at least one payload support coupled to the payload component and engaged with at least some of the engagement members, the payload support being adapted to beam loads from the payload component to the floor assembly and being moveable with the payload component relative to the floor assembly.